AMENDMENTS TO THE CLAIMS

Please enter the following amendments:

Please add claims 53-62.

1. **(Previously Presented)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein and is from a non-bioluminescent *Cnidarian* species, wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12.

2. **(Previously Presented)** The nucleic acid according to Claim 1, wherein said non-bioluminescent *Cnidarian* species is an *Anthozoan* species.

3. **(Original)** The nucleic acid according to Claim 1, wherein said nucleic acid is isolated.

4. **(Previously Presented)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes an *Anthozoan* chromo- or fluorescent protein and is from a non-*Pennatulacean Anthozoan* species, wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12.

5. **(Original)** The nucleic acid according to Claim 4, wherein said nucleic acid is isolated.

6. **(Previously Presented)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein and is from a non-bioluminescent *Cnidarian* species, wherein said protein has a sequence identity of at least about 75% with SEQ ID NO:12.

7. **(Previously Presented)** The nucleic acid according to Claim 6, wherein said protein has a sequence identity of at least about 80% with SEQ ID NO:12.

8. **(Previously Presented)** A nucleic acid present in other than its natural environment that encodes a chromo and/or fluorescent protein, wherein said protein is either:

(a) from a non-bioluminescent *Cnidarian* species; or

(b) from a non-*Pennatulacean Anthozoan* and

wherein said protein has a sequence identity of at least about 80% with SEQ ID NO:12.

9. **(Previously Presented)** The nucleic acid according to Claim 8, wherein said non-bioluminescent *Cnidarian* species is an *Anthozoan* species.

10. **(Original)** The nucleic acid according to Claim 9, wherein said nucleic acid is isolated.

11. **(Previously Presented)** The nucleic acid according to Claim 9, wherein said protein has an amino acid sequence of SEQ ID NO:12.

12. **(Previously Presented)** A nucleic acid present in other than its natural environment that encodes a chromo and/or fluorescent protein that is either:

(a) from a non-bioluminescent *Cnidarian* species; or

(b) from a non-*Pennatulacean Anthozoan* species; and

wherein said protein has a sequence identity of at least about 85% with SEQ ID NO:12.

13. **(Previously Presented)** The nucleic acid according to Claim 12, wherein said non-bioluminescent *Cnidarian* species is an *Anthozoan* species.

Claims 14-17 **(Canceled)**

18. **(Previously Presented)** A nucleic acid present in other than its natural environment that encodes a chromo and/or fluorescent protein that is either:

(i) from a non-bioluminescent *Cnidarian* species; or

(ii) from a non-*Pennatulacean Anthozoan* species;

wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12, and wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

19. **(Previously Presented)** The nucleic acid according to Claim 18, wherein said non-bioluminescent *Cnidarian* species is an *Anthozoan* species.

20. **(Previously Presented)** A construct comprising a vector and a nucleic acid that encodes a chromo and/or fluorescent protein that is either:

(i) from a non-bioluminescent *Cnidarian* species; or

(ii) from a non-*Pennatulacean Anthozoan* species; and

wherein said protein has a sequence identity of at least about 70% with SEQ ID NO:12.

21. **(Previously Presented)** The construct according to Claim 20, wherein said non-bioluminescent *Cnidarian* species is an *Anthozoan* species.

22. **(Previously Presented)** An expression cassette comprising:

(a) a transcriptional initiation region functional in an expression host;

(b) a nucleic acid selected from the nucleic acids according to Claim 1; and

(c) a transcriptional termination region functional in said expression host.

23. **(Original)** A cell, or the progeny thereof, comprising an expression cassette according to Claim 22 as part of an extrachromosomal element or integrated into the genome of a host cell as a result of introduction of said expression cassette into said host cell.

Claims 24-26 **(Canceled)**

27. **(Previously Presented)** A transgenic cell or the progeny thereof comprising a transgene selected from the nucleic acids according to Claim 1.

Claims 28-30 **(Canceled)**

31. **(Previously Presented)** A kit comprising the nucleic acid according to Claim 1 and instructions for using said nucleic acid.

32. **(Previously Presented)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein from a non-bioluminescent *Cnidarian* species, wherein said protein has a sequence identity of at least about 80% with SEQ ID NO:12.

33. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

34. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 350 to 650 nm.

35. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an absorbance maximum ranging from about 400 to 600 nm.

36. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

37. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an excitation spectrum ranging from about 350 to 650 nm and an emission spectrum ranging from about 425 to 775 nm.

38. **(Previously Presented)** The nucleic acid according to Claim 32, wherein said protein has an excitation spectrum ranging from about 400 to 600 nm and an emission spectrum ranging from about 450 to 750 nm.

39. **(Previously Presented)** The nucleic acid according to claim 32, wherein said protein has an amino acid sequence of SEQ ID NO:12.

40. **(Previously Presented)** A nucleic acid present in other than its natural environment, wherein said nucleic acid encodes a chromo- or fluorescent protein from a non-bioluminescent *Cnidarian* species, wherein said protein has a sequence identity of at least about 85% with SEQ ID NO:12.

41. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

42. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 350 to 650 nm.

43. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an absorbance maximum ranging from about 400 to 600 nm.

44. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

45. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an excitation spectrum ranging from about 350 to 650 nm and an emission spectrum ranging from about 425 to 775 nm.

46. **(Previously Presented)** The nucleic acid according to Claim 39, wherein said protein has an excitation spectrum ranging from about 400 to 600 nm and an emission spectrum ranging from about 450 to 750 nm.

47. **(Previously Presented)** The nucleic acid according to claim 32, wherein said protein has an amino acid sequence of SEQ ID NO:12.

48. **(Previously Presented)** The nucleic acid according to Claim 1, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

49. **(Previously Presented)** The nucleic acid according to Claim 1, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

50. **(Previously Presented)** The nucleic acid according to Claim 4, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

51. **(Previously Presented)** The nucleic acid according to Claim 4, wherein said protein has an excitation spectrum ranging from about 300 to 700 nm and an emission spectrum ranging from about 400 to 800 nm.

52. **(Previously Presented)** The nucleic acid according to Claim 6, wherein said protein has an absorbance maximum ranging from about 300 to 700 nm.

53. **(New)** The nucleic acid according to Claim 1, wherein said protein has one or more amino acid substitutions selected from amino acid substitutions at positions 2, 5, 9, 105, or 197 as compared to SEQ ID NO:12.

54. **(New)** The nucleic acid of Claim 1, wherein said protein has one or more amino acid substitutions selected from R2A, K5E, K9T, V105A, and S197T as compared to SEQ ID NO:12.

55. **(New)** The nucleic acid according to Claim 4, wherein said protein has one or more amino acid substitutions selected from amino acid substitutions at positions 2, 5, 9, 105, or 197 as compared to SEQ ID NO:12.

56. **(New)** The nucleic acid of Claim 4, wherein said protein has one or more amino acid substitutions selected from R2A, K5E, K9T, V105A, and S197T as compared to SEQ ID NO:12.

57. **(New)** The nucleic acid according to Claim 6, wherein said protein has one or more amino acid substitutions selected from amino acid substitutions at positions 2, 5, 9, 105, or 197 as compared to SEQ ID NO:12.

58. **(New)** The nucleic acid of Claim 6, wherein said protein has one or more amino acid substitutions selected from R2A, K5E, K9T, V105A, and S197T as compared to SEQ ID NO:12.

59. **(New)** The nucleic acid according to Claim 32, wherein said protein has one or more amino acid substitutions selected from amino acid substitutions at positions 2, 5, 9, 105, or 197 as compared to SEQ ID NO:12.

60. **(New)** The nucleic acid of Claim 32, wherein said protein has one or more amino acid substitutions selected from R2A, K5E, K9T, V105A, and S197T as compared to SEQ ID NO:12.

61. **(New)** The nucleic acid according to Claim 40, wherein said protein has one or more amino acid substitutions selected from amino acid substitutions at positions 2, 5, 9, 105, or 197 as compared to SEQ ID NO:12.

62. (**New**) The nucleic acid of Claim 40, wherein said protein has one or more amino acid substitutions selected from R2A, K5E, K9T, V105A, and S197T as compared to SEQ ID NO:12.